Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
Provision of Improved	)	
Telecommunications Relay Service	)	CC Docket No. 98-67

Comments of Self Help for Hard of Hearing People (SHHH) On The Provision of Improved Telecommunications Relay Service

Self Help for Hard of Hearing People (SHHH) submits these comments in response to the request of the Consumer Information Bureau (Bureau) for additional comment on the provision of improved Telecommunications Relay Service (TRS)[1].

Introduction

*S*HHH is a national educational organization representing people with hearing loss. Its members are people of all ages and degrees of hearing loss. Through a national office, eight state associations and a network of 250 chapters and groups across the country, SHHH members consistently work towards increasing communication access to enable people with hearing loss to continue to function in mainstream society. Access to telecommunications is integral to being able to actively participate in today's world.

It is estimated that one in ten of the population has some degree of hearing loss. This number is on the increase as a result of the noise that we are exposed to and the aging of our society. The incidence is even higher for

[1] Petition for Clarification of WorldCom, Inc., CC Docket. 90-571 (filed Dec. 22, 2001) (WorldCom Petition). The Commission originally sought comment on Internet protocol relay (IP Relay) service in the *Improved TRS Order and FNPRM*. This Public Notice seeks to supplement the record received in response to the *FNPRM* concerning IP Relay. *See* Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, *Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 98-67, 15 FCC Rcd 5140 (rel. Mar 6, 2000) (*Improved TRS Order and FNPRM.)*

people over 65 years of age, of whom one in three has some degree of hearing loss. In the United States today approximately 6 million people use hearing aids and 20,000 people have cochlear implants.

Background

In this Public Notice, the Consumer Information Bureau (Bureau) solicits additional comment on the provision of improved Telecommunications Relay Service (TRS). Title IV of the Americans with Disabilities Act (ADA) requires the Commission to promulgate regulations on TRS, to make available to Americans with hearing or speech disabilities telecommunications services that are functionally equivalent to those available to individuals without disabilities. In its First Report and Order on TRS, the Commission established minimum operational, technical, and functional standards to fulfill this mandate. In 2000, the Commission released additional minimal standards to supplement these earlier standards. Specifically, in its Improved TRS Order and FNPRM, the Commission both expanded the scope of eligible services that would be classified to receive reimbursement as relay services, and established new criteria for relay providers to improve the quality of relay services.

The Improved TRS Order and FNPRM took note of the fact that new technologies are continually challenging the Commission to determine the most appropriate means of achieving functionally equivalent relay service. The Commission stated that the language of the ADA requires that it encourage, consistent with section 7(a) of the Act, the use of existing technology and that it not discourage or impair the development of improved technology. To that end, the Improved TRS Order and FNPRM solicited comment on a number of new relay features and technologies that could

facilitate the provision of functionally equivalent TRS, including use of the Internet for relay services.

On December 22, 2000, WorldCom filed a Petition for Clarification of the Improved TRS Order and FNPRM. WorldCom seeks clarification that its connection to TRS via the Internet (IP Relay) is eligible for reimbursement from the Interstate TRS Fund. WorldCom's IP Relay Service carries the first leg of a TRS call, between the caller and the CA, over the Internet. The second leg, from the CA to the point of destination, is carried by the public switched telephone network.

In order to follow up with information gathered at meetings with WorldCom and Communications Services for the Deaf, the FCC seeks additional information about the use of the Internet for relay services before a final order on this subject will be issued.

Summary of SHHH Comments

The purpose of the Telecommunications Relay Service (TRS) is to provide a functionally equivalent means for people with hearing loss to use telecommunication services[2]. The solicitation of comments on improved TRS is timely because TRS services are now lagging behind the

[2] 47 U.S.C. §225(d). TRS enables persons with hearing and speech disabilities to communicate by telephone with persons who may or may not have such disabilities. There are three existing types of TRS: text-to-voice, which uses relay operators called communications assistants (CAs) to read text telephone text (TTY) text to a person using a conventional voice phone and to type responses back to the TTY user; video relay services (VRS), which uses CAs/interpreters and video equipment to interpret between users of American Sign Language and conventional voice callers; and speech-to-speech relay, which uses specially trained CAs to facilitate conversations between individuals who have speech disabilities and other individuals.

telecommunication industry. As telecommunication advances are made, we must ensure that people with hearing loss are able to access these services, especially in cases where the "new" feature is the only means of participating.

The increased use of teleconferences to conduct business and facilitate urgent discussions is a case in point. Teleconferences are being used more and more to reduce travel costs, or to conduct a discussion when there is not sufficient time to travel. Currently teleconferences are not accessible to people with hearing loss and SHHH recommends that these telecommunication environments be added to the TRS requirements.

SHHH supports the improvement of TRS to include IP relay services and supports a funding mechanism that does not place the financial burden on the parties communicating via TRS. While TRS is promoted as a service for people with hearing loss, the service is also for hearing members of our society that conduct, or have the potential to conduct, business with people with hearing loss. SHHH comments on four of the issue areas as set forth in the instant Public Notice.

1. Benefits

The relative importance of the three benefits listed by WorldCom [3] to people with hearing loss is somewhat overstated. The services listed by WorldCom are considered enhanced services for traditional voice callers and are not standard, but involve additional cost to the users. Multiple

[3] "WorldCom states that its IP Relay Service provides customers with many benefits, including the ability to make multiple calls simultaneously, make conference calls, and view websites while calling." FCC Docket 98-67 at p 3.

simultaneous calls and the ability to view web sites while calling, while being admirable features, should not be a required feature at this time. However, the ability to participate in conference calls is a necessary service for people with hearing loss and should be added to TRS.

Teleconferences cannot be made accessible using current relay operators because the teleconference environment is more dynamic and does not involve the traditional turn-taking that is required for a single user to single user call. In a traditional TRS call, the communication assistant (CA) can ask for something to be repeated or instruct the single speaker to slow down. When the caller is finished with his/her part of the conversation, the caller types “GA” (“Go Ahead”) indicating that it is the other caller's turn. In a teleconference, however, the procedures are different. There is no opportunity to instruct the multiple participants to dictate their contribution to the conversation instead of speaking. Participants take turns by jumping into the conversation, without pausing and without stating "GA" and waiting for the person with hearing loss to reply. This makes a teleconference almost impossible for a CA to transcribe accurately or for a person with hearing loss to follow.

In addition, the current TRS system has the CA facilitating the call using a minimum requirement for typing speed and requiring the person with hearing loss to have either a TTY machine that may be limited in its baud rate, or to use ASCII via a Personal Computer (PC). In contrast, while a teleconference takes place at speeds in excess of 200 words per minute, the typing speed and TTY requirements limit the relayed conversation to speeds of approximately 50 words per minute. Not only is the teleconference

discussion seriously delayed so that the person with hearing loss cannot participate, but at least 75% of the conversation is dropped.

One of the benefits of IP relay is that the use of a PC and ASCII are removed. This still leaves the typing speed. In order to make teleconferences accessible to people with hearing loss, the teleconferencing CA must be using stenographic equipment that permits real time writing at speeds in excess of 200 words per minute. SHHH recommends that the TRS requirements be upgraded to include teleconferencing environments where real time captioning is made available over the IP relay. This captioned TRS requirement cannot be delayed, because the ability of the person with hearing loss to participate in teleconferences is imperative for employment equity.

Another benefit of IP relay is that it allows a user to communicate with anyone no matter what communication devices they use – Palm Pilots, pagers, e-mail, text messaging, or digital telephones, among others. This is the direction TRS should take for the future in the workplace. IP relay allows the individual employee with a hearing loss to access telecommunication services from any location that has an Internet access opportunity. Further, for Voice Carry Over (VCO) users, WorldCom IP relay currently supports a way to use 2-line VCO without the expense of an additional telephone line. With telephone systems that use a central line and routers, an additional dedicated line must be added for a 2LVCO user. If a 2LVCO user initiates a call on a system that dials out using the first available line, it is difficult, if not impossible, to retain profile information on all of the outgoing lines. The WorldCom IP relay provides more

capability for 2LVCO in an environment where the 2LVCO user has both a phone line and separate Internet access.

2. Cost Recovery

An Interstate TRS fund should be used to reimburse IP relay now, because relay usage encourages technological developments. Therefore, IP relay should be funded, as it is a technological development that brings TRS into the 21st century. All IP relay users must be able to communicate with all text-based device users.

Calls made without the assistance of a CA should be reimbursed in order to encourage the development of more cost-effective techniques that do not require CAs for some or all of the call. The more that direct communication is supported and is free to the user, the less frequently that expensive human-operated relay services will need to be used. Relay services are expensive, costing well over a dollar a minute in California, for example. Computer to TTY, Internet to TTY, TTY to Internet bridges (i.e., automated translation services between otherwise incompatible devices) should all be free to the user and funded by the TRS fund, but funded at a lower rate than for regular relay services.

The future of telecommunications is in digital technology. The old Baudot TTYs could be retired, and allow their users to enter the digital telecommunications age by providing free, toll-free bridges supported by the TRS fund between Baudot-only TTYs and PCs and the Internet. Users of Baudot-only TTYs would be able to use these bridges to talk to anyone they

wanted, and anyone could talk to them. The point of this is to avoid trapping users of old technology into a ghetto of non-digital technology and services. Funding these bridges through the TRS fund could help the transition to digital services occur more rapidly.

3. Minimum Standards

IP Relay should be subject to the same minimum standards as existing relay with regard to quality of service[4]. Requirements relating to long distance calling preferences may not be appropriate in this case, because if the call origin cannot be determined, long distance requirements cannot be assessed. Further, if the call origin cannot be determined then automated 911 requirements may not be applicable. However, the IP relay caller should still be able to access 911, but may be required to enter address or telephone information that could be used to provide location information.

Additional standards should be placed on teleconferencing where multiple callers are participating without the traditional turn-taking of a single user to single user call. These calls must be facilitated at higher speed of relay (higher than 200 words per minute) to allow the caller with hearing loss to participate. If this is facilitated by an on-site real time captioner, there should be a minimum number of captioners always available during business hours (8 am EST to 6 pm PST) and on a scheduled basis outside of regular business hours. If this is facilitated by a remote real-time captioner, the relayed conversation cannot be delayed.

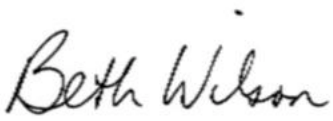
4. Security

Hearing callers are not subject to recorded information about the content of their calls or any personal information. Confidentiality is a serious and necessary requirement, for both personal and business calls and teleconferences. Confidentiality must be strictly applied and provisions made for security of such information via IP Relay for both the call contents and user profiles.

Conclusion

SHHH supports actions that promote technology sector growth and innovations so long as the products that result from such advancement are available to the people in our population that have a hearing loss. Improved Telecommunications Relay Service shows great promise in advancing the telecommunications access of all people with hearing loss.

Respectfully submitted,



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[4] 47 C.F.R. §64.604(a)(1),(b)(1). CAs must type at least 60 words per minute, and 85% of all calls must be answered within ten seconds.